books to him and explained them. He was next sent to a private academy at Attercliff near Sheffield, where logic and metaphysics were chiefly taught. But these sciences not suiting his turn of mind, he soon left the academy. He lived for some time in the country without any instruc­tor ; but such was the vigour of his own mind, that few in­structions were necessary. He only required books and a reader.

His father, besides the place he had in the excise, pos­sessed also a small estate; but having a numerous family to support, he was unable to give him a libcral education at one of the universities. Some of his friends, who had re­marked his perspicuous and interesting manner of commu­nicating his ideas, proposed that he should attend the uni­versity of Cambridge as a teacher of mathematics. This proposal was immediately put in execution, and he was ac­cordingly conducted to Cambridge in his twenty-fifth year, by Mr Joshua Dunn, a fellow-commoner of Christ’s College. Though he was not received as a member of the college, he was treated with great attention and respect. He was allowed a chamber, and had free access to the library. Mr Whiston was at that time professor of mathematics, and as he read lectures in the way that Saunderson intended, it was naturally to be supposed he would view his project as an invasion of his office. But, instead of meditating any opposition, the plan was no sooner mentioned to him than he gave his consent to it. Saunderson’s reputation was soon spread throughout the university. When his lectures were announced, a general curiosity was excited to hear such intricate mathematical subjects explained by a man who had been blind from his infancy. The subject of his lec­tures was the *Principia Mathematica,* the Optics, and the *Arithmetica Universalis,* of Sir Isaac Newton. He was ac­cordingly attended by a very numerous audience. It will appear at first incredible to many that a blind man should be capable of explaining optics, which requires an accurate knowledge of the nature of light and colours ; but we must recollect that the theory of vision is taught entirely by lines, and is subject to the rules of geometry.

While thus employed in explaining the principles of the Newtonian philosophy, he became known to its illustrious author. He was also intimately acquainted with Halley, Cotes, Demoivre, and other eminent mathematicians. When Whiston was removed from his professorship, Saunderson was universally allowed to be the man best qualified for the succession. But to enjoy this office it was necessary, as the statutes direct, that he should be promoted to a de­gree. To obtain this privilege, the heads of the univer­sity applied to their chancellor the Duke of Somerset, who procured the royal mandate to confer upon him the degree of master of arts. He was then elected Lucasian profes­sor of mathematics in November 1711. His inauguration speech was composed in classical Latin, and in the style of Cicero, with whose works he had been much conversant. He now devoted his whole time to his lectures and the instruction of his pupils. In 1728, when George II. vi­sited the university of Cambridge, he expressed a desire to see Professor Saunderson. In compliance with this de­sire, he waited upon his majesty in the senate-house, and was there, by the king’s command, created doctor of laws. He was admitted a member of the Royal Society in 1736.

Saunderson was naturally of a vigorous constitution, but having confined himself to a sedentary life, he at length became scorbutic. For several years he felt a numbness in his limbs, which in the spring of 1739 brought on a mortification in his foot ; and, unfortunately, his blood was so vitiated by the scurvy, that assistance from medicine was not to be expected. When he was informed that his death was near, he remained for a little space calm and si­lent ; but he soon recovered his former vivacity, and con­versed with his usual ease. He died on the 19th of April

1739, in the fifty-seventh year of his age, and was buried at his own request in the chancel at Boxworth. He mar­ried the daughter of Mr Dickens, rector of Boxworth, in Cambridgeshire, and by her had a son and a daughter.

Dr Saunderson was rather to be admired as a man of wonderful genius and assiduity, than to be loved for his amiable qualities. He spoke his sentiments freely of cha­racters, and praised or condemned his friends as well as his enemies without reserve. This has been ascribed by some to a love of defamation ; but it has with more propriety been attributed by others to an inflexible love of truth, which urged him upon all occasions to speak the sentiments of his mind without disguise, and without considering whe­ther this conduct would please, or the reverse. His senti­ments were supposed to be unfavourable to revealed religion. It is said that he alleged he could not know God, because he was blind, and could not see his works ; and that upon this Dr Holmes replied, “ Lay your hand upon yourself, and the organization which you will feel in your own body will dissipate so gross an error.” On the other hand, we are informed that he had desired the sacrament to be given him on the evening before his death. He was however seized with a delirium, which rendered this impossible.

He wrote a system of algebra, which was published in two volumes 4to, at London, after his death, in the year

1740, at the expense of the university of Cambridge.

Dr Saunderson had invented for his own use a Palpable Arithmetic, that is, a method of performing operations in arithmetic solely by the sense of touch. It consisted of a table raised upon a small frame, so that he could apply his hands with equal case above and below. On this table were drawn a great number of parallel lines, which were crossed by others at right angles ; the edges of the table were divided by notches half an inch distant from one an­other, and between each notch there were five parallels, so that every square inch was divided into a hundred little squares. At each angle of the squares where the parallels intersected one another, a hole was made quite through the table ; and in each hole were placed two pins, a large and a small one. It was by the various arrangements of the pins that Saunderson performed his operations.

His sense of touch was so perfect that he could discover with the greatest exactness the slightest inequality of sur­face, and could distinguish in the most finished works the smallest oversight in the polish. In the cabinet of medals at Cambridge he could single out the Roman medals with the utmost correctness ; and he could also perceive the slightest variation in the atmosphere. One day, while some gentlemen were making observations on the sun, he took notice of every little cloud that passed over his disk and served to interrupt their labours. When any object passed before his face, even though at some distance, he discovered it, and could guess its size with considcrable accuracy. When he walked, he knew when he passed by a tree, a wall, or a house. He had made these distinctions from the different ways his face was affected by the motion of the air.

His musical ear was so remarkably acute, that he could distinguish accurately to the fifth of a note. In his youth he had been a performer on the flute, and he had made such proficiency, that if he had cultivated his talents in this way, he would probably have been as eminent in music as he was in mathematics. He recognised not only his friends, but even those with whom he was slightly acquainted, by the tone of their voice ; and he could judge with wonder­ful exactness of the size of any apartment into which he was conducted.

SAURIN, James, a celebrated preacher, was born at Nismes in 1677, being the son of a Protestant lawyer of con­siderable eminence. He applied to his studies with great success ; but at length being captivated with a military life,